Zack Edward Sullivan

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Research and Professional Experience

| Associate Professor | Illinois Institute of Technology | 2014-present |
|------------------------------|----------------------------------|--------------|
| Assistant Professor | Illinois Institute of Technology | 2008 – 2014 |
| Research Assistant Professor | Southern Methodist University | 2007 – 2008 |
| Visiting Physicist | University of Chicago | 2006 |
| Assistant Physicist | Argonne National Laboratory | 2005 |

Education and Training

| Fermi National Accelerator Laboratory | Physics | Post Doc | 2001 - 2005 |
|--|--------------|----------|-------------|
| Argonne National Laboratory | Physics | Post Doc | 1998 – 2001 |
| University of Illinois at Urbana-Champaign | Physics | Ph.D. | 1998 |
| University of Illinois at Urbana-Champaign | Physics | M.S. | 1994 |
| Johns Hopkins University | Physics&Math | B.A. | 1993 |

Synergistic Activities

Co-organizer of the CTEQ Summer Schools; also lectured in 2007, 2009, 2011, 2014.

Chairman of the XLIIIrd International Symposium on Multiparticle Dynamics, IIT, September 15–20, 2013.

Organizer of the Top Quark parallel session of the APS DPF 2011 conference, Providence, RI, August 2011.

Local organizer of NuFact09: 11th International Workshop on Neutrino Factories, Superbeams and Beta Beams, Illinois Institute of Technology, July 2009.

Chairman of Collider Physics 2009: Joint Argonne & IIT Theory Institute, Argonne National Laboratory and Illinois Institute of Technology, May 2009.

Judge for the Chicago Public Schools Science Fairs 2010–.

Referee for Physical Review Letters, Physical Review D, Physical Review X, Journal of High Energy Physics, Nature Communications, European Physical Journal C, Europhysics Letters, Computer Physics Communications, Annalen der Physik, and the Particle Data Group.

Memberships

Coordinated Theoretical/Experimental Project on QCD (CTEQ) Collaboration American Physical Society — Division of Particles and Fields International Symposium on Multiparticle Dynamics, Board of Elders

Selected Publications

- 1. Seth Quackenbush and Zack Sullivan, "Parton distributions and the W mass measurement," to appear in Phys. Rev. D [arXiv:1502.04671 [hep-ph]].
- 2. Daniel Duffty and Zack Sullivan, "Searching for W' bosons through decays to boosted-top and boosted-bottom jets," Phys. Rev. D **90**, 015031 (2014) [arXiv:1307.1820 [hep-ph]].
- 3. Sergei Chekanov and Zack Sullivan, eds., "Proceedings of the XLIIIrd International Symposium on Multiparticle Dyanamics," 340 pgs. (IIT Press, Chicago, 2014) ISBN 978-1-61597-002-5.
- 4. Edmond L. Berger, Zack Sullivan, and Hao Zhang, "LHC and Tevatron constraints on a W' model interpretation of the top quark forward-backward asymmetry," Phys. Rev. D 88, 114026 (2013) [arXiv:1309.7110 [hep-ph]].
- 5. Daniel Duffty and Zack Sullivan, "Model independent reach for W' bosons at the LHC," Phys. Rev. D **86**, 075018 (2012) [arXiv:1208.4858 [hep-ph]].
- 6. Zack Sullivan and Arjun Menon, "A standard model explanation of a CDF dijet excess in Wjj," Phys. Rev. D 83, 091504(R) (2011) [arXiv:1104.3790 [hep-ph]].
- 7. Zack Sullivan and Edmond L. Berger, "Isolated leptons from heavy flavor decays: Theory and data," Phys. Rev. D 82, 014001 (2010) [arXiv:1003.4997 [hep-ph]].
- 8. Zack Sullivan and Edmond L. Berger, "Trilepton production at the CERN LHC: Standard model sources and beyond," Phys. Rev. D **78**, 034030 (2008) [arXiv:0805.3720 [hep-ph]].
- 9. Zack Sullivan and Edmond L. Berger, "Missing heavy flavor backgrounds to Higgs production," Phys. Rev. D **74**, 033008 (2006) [arXiv:hep-ph/0606271].
- 10. Zack Sullivan, "Angular correlations in single-top-quark and Wjj production at next-to-leading order," Phys. Rev. D **72**, 094034 (2005) [arXiv:hep-ph/0510224].
- 11. Zack Sullivan, "Understanding single-top-quark production and jets at hadron colliders," Phys. Rev. D **70**, 114012 (2004) [arXiv:hep-ph/0408049].
- 12. Zack Sullivan, "Fully differential W' production and decay at next-to-leading order in QCD," Phys. Rev. D **66**, 075011 (2002) [arXiv:hep-ph/0207290].

For a complete list of publications, see: http://phys.iit.edu/~zack/ZS_CVfullpub.pdf